

## Two new genera, *Mediocerus* and *Mexicanocerus*, and Five New Species of Idiocerinae (Homoptera: Cicadellidae)<sup>1</sup>

PAUL H. FREYTAG

Department of Entomology, University of Kentucky,  
Lexington, Kentucky 40546-0091

### ABSTRACT

The new genus *Mediocerus*, with new species *M. mexicanus* (type-species), *M. parallelus* and *M. excavatus*, and the new genus *Mexicanocerus*, with new species *M. whitacrei* (type-species) and *M. minutus* are all described from Mexico.

Two new genera of idiocerine leafhoppers, recently collected from Mexico, are described at this time. Both genera resemble the *dolosus* group of *Idiocerus* (Freytag, 1965), but both genera have a different type of male genitalia, and differ from each other. No host-plant associations are known, as most specimens were collected by David Whitacre, University of California, who extracted them from the crops of swifts.

### *Mexicanocerus* gen. n.

Crown short, broadly rounded, nearly same length in middle as near eyes. Face broad, somewhat convex. Ocelli small, usually same distance from eye as from each other. Femeral setal formula 2-0. Aedeagus short, with robust apodeme, one pair of ventral basal processes, apex of shaft with sharp spine-like process. Forewing with venation as in *Idiocerus*.

Type-species: *Mexicanocerus whitacrei* sp. n.

This genus is similar in appearance to the *Idiocerus dolosus* group as they are usually brown, and either speckled or spotted with dark brown. Both *Mexicanocerus* and *Idiocerus* (*dolosus* group) occur in the same geographical region and are the same size, shape and color. *Mexicanocerus* is, however, easily recognized by the differences of the male genitalia. In *Mexicanocerus* the aedeagus has a pair of basal processes as well as a single spine at apex of shaft (easily broken off), whereas *Idiocerus* and other genera occurring in Mexico and Central America have neither of these characters.

### *Mexicanocerus whitacrei* sp. n.

(Figs. 1-4)

Length of males 6.0-6.1 mm, female unknown; width of male head 2.5 mm. Vertex broadly rounded, thin, same length in middle as near eyes, wider than pronotum.

Color: head, pronotum and scutellum light brown with dark brown speckles and spots. Forewings brown, with veins dark brown, some lighter spots at ends of claval veins and in anteapical cells.

Male genitalia: pygofer bluntly rounded, with process on dorsal margin robust and bluntly foot-shaped. Plate long, bent slightly at one-third length, slightly longer than pygofer. Style short, robust, wider at apex which is hook-shaped, setae along outer apical margin. Aedeagus robust at base, shaft narrowing to very thin apex, with an apical spine directed ventrad; basal processes narrow, nearly paralleling shaft, extending to apex of shaft; apodeme large, close to shaft.

Holotype male: Mexico, labeled "Near Taxco, Guerrero, 27-30 June 1985, David F. Whitacre, from crop of swift," and deposited in the California Academy of Science Collection. Paratypes: 5 males, same data as holotype, 3 deposited in the California Academy of Science Collection and 2 in the University of Kentucky Collection.

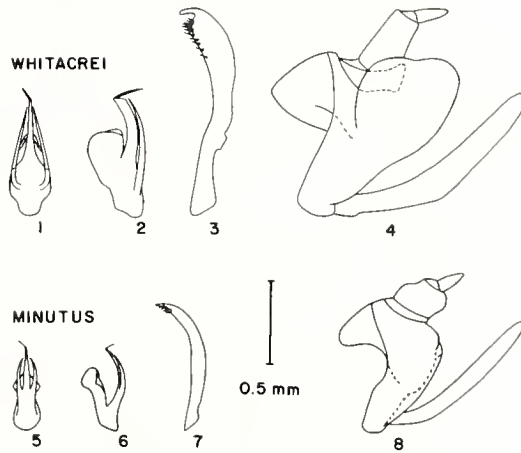
Note: This species is named For David F. Whitacre, the collector of this species.

### *Mexicanocerus minutus* sp. n.

(Figs. 5-8)

Length of male 5.3 mm, female unknown; width of male head 1.8 mm. Vertex evenly rounded, same length in middle as next to eyes.

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FIGS. 1-4. *Mexicanocerus whitacrei* sp. n. 1. ventral view of aedeagus. 2. lateral view of aedeagus. 3. lateroventral view of style. 4. lateral view of genital capsule and anal tube.  
 FIGS. 5-8. *Mexicanocerus minutus* sp. n. 5. ventral view of aedeagus. 6. lateral view of aedeagus. 7. lateroventral view of style. 8. lateral view of genital capsule and anal tube. All drawn to same scale.

Color: head uniformly yellow brown with darker brown shading along lateral margins of clypeal area, two small dark "eye spots" on margin. Pronotum yellow brown mottled with brown. Scutellum mostly brown with some lighter yellow brown areas, especially at posterior end. Forewings hyaline with brown veins, basal costal margin thickened and yellow.

Male genitalia: pygofer short, bluntly rounded, apex notched, giving dorsal margin truncated appearance. Plate long, narrow, bent slightly near base, longer than pygofer. Style small, narrowing and curving to pointed apex, setae on outer margin at apex. Aedeagus small, shaft narrowing to very fine pointed apex, with a small ventral projecting spine at apex; a pair of basal processes extending to near apex of shaft; apodeme large, diamond-shaped.

Holotype male: Mexico, labeled "Chiapas, 3 June to 6 July 1985, David F. Whitacre, from crop of swift," deposited in the California Academy of Science Collection.

Notes: This species is easily separated from *whitacrei* by being smaller and having distinctly different male genitalia, as noted in Figures 1-4 for *whitacrei* and Figures 5-8 for *minutus*. The spine at the apex of the aedeagus can be easily broken off on both species as it was on the type of this species when the specimen was being dissected.

*Mediocerus* gen. n.

Crown very short, broadly rounded, usually much shorter in middle than near eyes. Face ventral, somewhat convex. Ocelli small, usually somewhat closer to eyes than distance between them. Femoral setal formula 2-0. Aedeagus strap-like, with one pair of processes which arise from and parallel to shaft, apex slightly expanded, flattened, rounded; apodeme large and rounded.

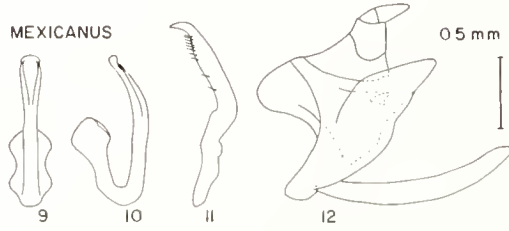
Type-species: *Mediocerus mexicanus* sp. n.

This genus is also similar in appearance to the *Idiocerus dolosus* group and *Mexicanocerus*. However, this genus can be easily recognized by the differences in the male genitalia. In *Mediocerus* the aedeagus has a pair of inconspicuous processes arising from and paralleling shaft, and the shaft curves from the base. In other genera the processes of the aedeagus are usually apical or subapical and the shaft angles from the base.

*Mediocerus mexicanus* sp. n.

(Figs. 9-12)

Length of male 7.0 mm, female 7.2 mm; width of male head 2.8 mm, female head 3.0 mm. Vertex evenly rounded, much shorter in middle than near eyes. Pronotum bulbous, elevated above head. Forewings flaring, venation as in *Idiocerus*, with a large appendix.



FIGS 9-12. *Mediocerus mexicanus* sp. n. 9 ventral view of aedeagus. 10 lateral view of aedeagus. 11. lateroventral view of style. 12. lateral view of genital capsule and anal tube. All drawn to same scale.

**Color:** generally yellowish-brown, mottled with brown on head, pronotum and scutellum. Forewings mostly uniformly yellow brown with brown veins, second claval vein ending with a whitish spot, lighter yellow area between end of second claval vein and apex of clavus, extending toward the costal area of wing (more extensive in female and forming band across wing).

**Male genitalia:** pygofer narrow, bluntly pointed at apex, thickened ventral margin, with a foot-shaped process on dorsal margin below anal tube. Plate long, narrow, nearly same width throughout, same length as pygofer. Style even width to narrower claw-like apex, outer margin below apex with a group of setae, some setae extending nearly to base. Aedeagus long, strap-like, with a pair of processes starting at two-thirds length of shaft, paralleling shaft, extending length of shaft; apodeme large, bulbous.

**Female genitalia:** ovipositor extending beyond pygofer by its own width. Pygofer rounded, somewhat narrowed at apex. Seventh sternum triangularly produced with a rounded median emargination.

**Holotype male:** Mexico, labeled "Cuernavaca-Acapulco Road, Mexico, 8-29-36, Ball & Stone, 382," in the U.S. National Museum Collection. Paratype female, same data and on the same point with the holotype.

**Note:** No other specimens of this species have been seen.

*Mediocerus parallelus* sp. n.  
(Figs. 13-16)

**Length of males** 7.2-7.3 mm, female unknown; width of male's head 2.8 mm. Vertex evenly rounded, very thin in dorsal view. Pronotum, scutellum and forewing as in *Mediocerus mexicanus*.

**Color:** similar to *mexicanus*, but slightly darker brown, with white spot at apex of both claval veins and lighter yellow area forming definite band across forewing from costal margin to apex of clavus, veins in band tinged with white.

**Male genitalia:** similar to *mexicanus* but larger. Pygofer process bluntly truncate. Aedeagus longer, curved near apex, with processes half length of shaft.

**Holotype male:** Mexico, labeled "Arcelia, Guerrero, 8-17-30, MF 1766, J. Parra Coll.," in the DeLong Collection, Ohio State University. Paratype, one male labeled "Near Taxco, Guerrero, 27-30 June 1985, David F. Whitacre, from crop of swift," deposited in the California Academy of Science Collection.

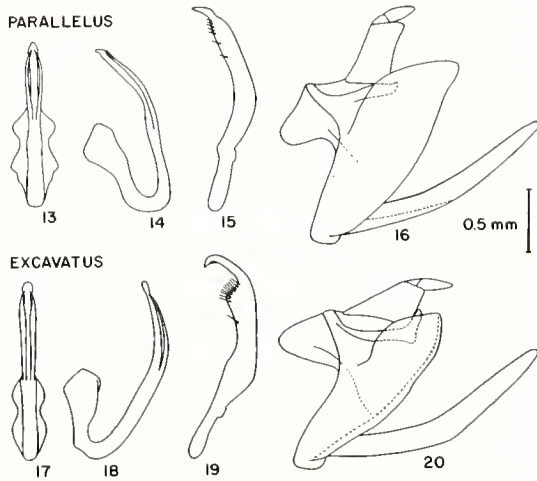
**Note:** This species is nearly the same size and shape as *mexicanus*, but differs in both color pattern and male genitalia (Figs. 9-12 and 13-16).

*Mediocerus excavatus* sp. n.  
(Figs. 17-20)

**Length of male** 7.0 mm, female unknown; width of male head 2.6 mm. Similar to *parallelus*, only smaller, darker, with different male genitalia.

**Color:** generally the same color pattern as *parallelus*, but spotting, especially on face, dark brown; band across forewing less conspicuous.

**Male genitalia:** pygofer bluntly pointed at apex, thickened along entire ventral margin, process large, foot-shaped. Plate longer than pygofer, angled near middle. Style expanded slightly near apex, with apex forming large claw-like hook, setae mostly on basal area of hook (Fig. 19). Aedeagus strap-like, bent dorsal near apex, with processes one-third length of shaft, parallel to shaft, extending to near apex of shaft.



FIGS. 13-16. *Mediocerus parallelus* sp. n. 13. ventral view of aedeagus. 14. lateral view of aedeagus. 15. lateroventral view of style. 16. lateral view of genital capsule and anal tube.

FIGS. 17-20. *Mediocerus excavatus* sp. n. 17. ventral view of aedeagus. 18. lateral view of aedeagus. 19. lateroventral view of style. 20. lateral view of genital capsule and anal tube. All drawn to the same scale.

Holotype male: Mexico, labeled "Puebla, 13.3 mi. NE Tehuitzingo, July 13-14, 1974, Clark, Murray, Ashe, Schaffner," from the Texas A&M University Collection, and to be deposited in the California Academy of Science Collection.

Note: This species is similar to *parallelus*, but the pygofer process is more foot-shaped and the style is very distinctly notched at apex.

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LITERATURE CITED

Freytag, P. H. 1965. A revision of the Nearctic species of the genus *Idiocerus* (Homoptera: Cicadellidae: Idiocerinae). *Trans. Amer. Entomol. Soc.* 91:361-430.